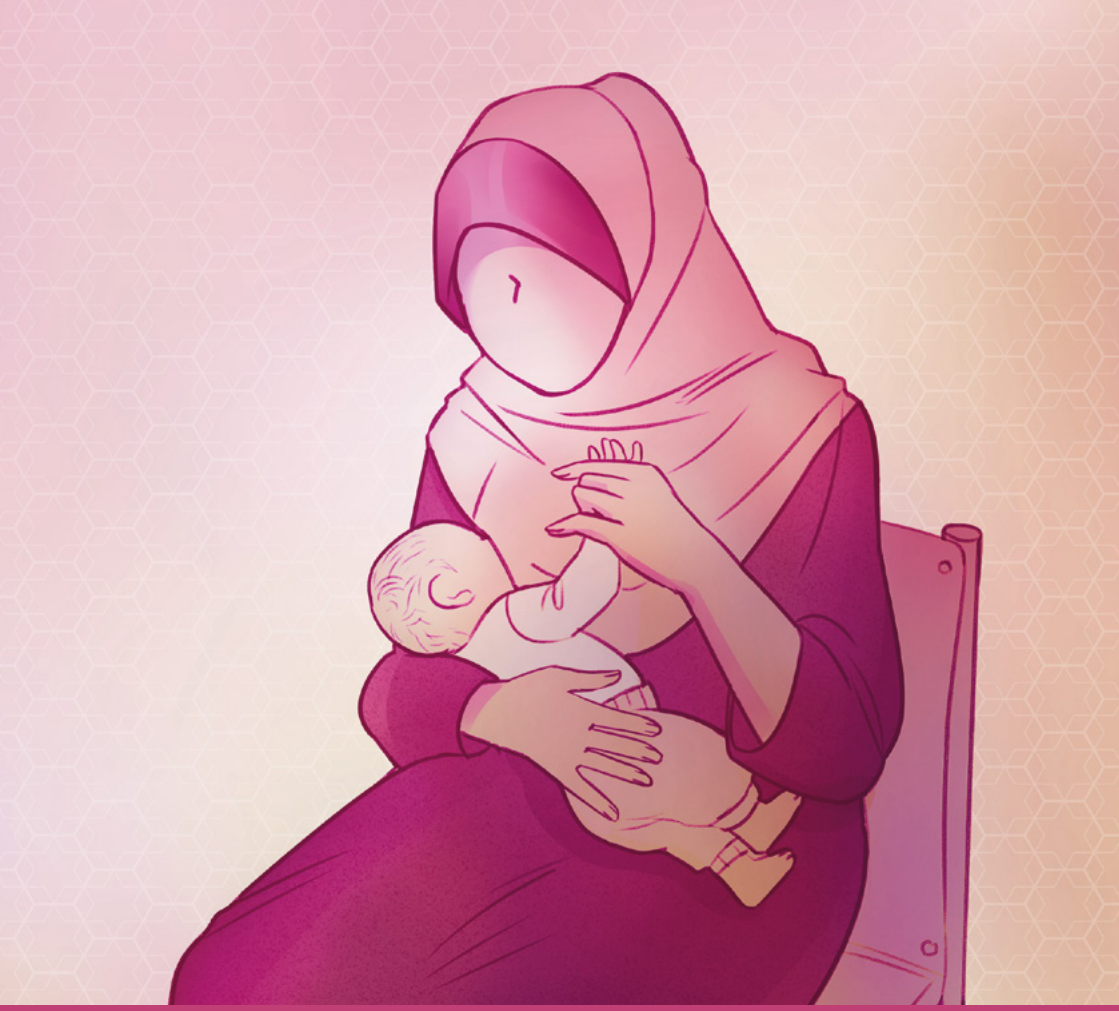


Antenatal Pocket Guide for Health Care Personnel in Somaliland

Recommendations by MoHD

2019

Antenatal Pocket Guide for Health Care Personnel in Somaliland

Recommendations by MoHD
2019

Finnish institute for health and welfare

NUOVO NORDIC HEALTHCARE SERVICES

Working group of representatives from:
MoHD,
Nuovo Nordic Healthcare Services and
Finnish Institute for Health and Welfare (THL)

Graphic design and layout: Tiina Kuoppala
Cover design: Tiina Kuoppala
Illustrations: Huda Abdi

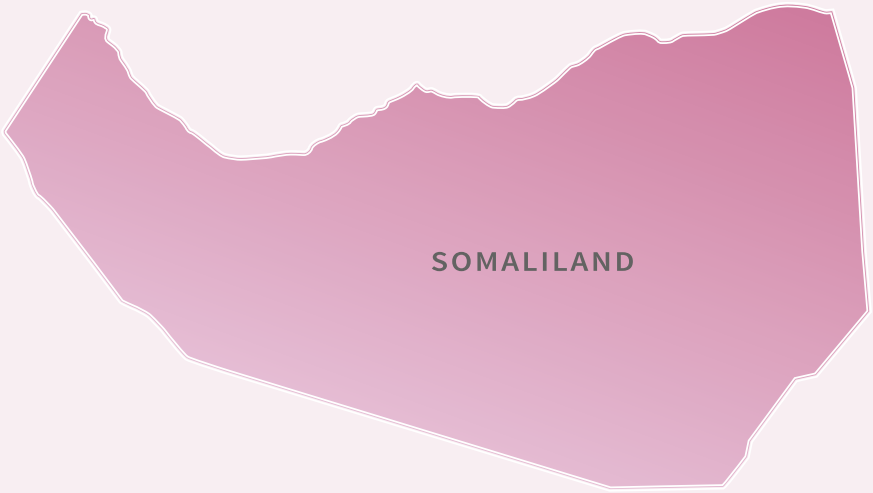
ISBN (printed) 978-952-343-498-1
ISBN (online) 978-952-343-499-8
http://urn.fi/URN:ISBN:978-952-343-499-8

PunaMusta Oy
Helsinki, FINLAND 2020

Foreword

Healthy mothers and babies are the foundation of a society. The best way to ensure the health of mothers and babies is to develop universal, well-functioning and high quality antenatal care.

This pocket guide is for all ANC (antenatal care) professionals, traditional birth attendants and family workers, training institutions, students, INGOs, and NGOs. With this new pocket guide, all professionals working in ANC will have the best evidence on how to screen, treat and guide pregnant women in Somaliland to ensure a safe pregnancy and childbirth for every woman in Somaliland.



Contents

1 Introduction

Preventable, pregnancy-related morbidity and mortality are unacceptably high in Somaliland. Effective interventions at reasonable costs could prevent most maternal deaths, life-threatening morbidity and complications. However, the goal in maternity care is not only to avoid morbidity and mortality but also to improve the health and well-being of girls, women and their families.

Female genital mutilation/cutting (FGM/C) comprises all procedures that involve removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons. Girls and women who have experienced FGM/C should be provided with high quality health care. The practice violates medical ethics because it is harmful. Thus it is never acceptable that health care providers perform FGM/C.

This pocket guide is based on ANC guidelines (2019) for Somaliland and is designed for every professional working in ANC. It is based on the WHO guidelines on routine ANC for pregnant women and adolescent girls. This pocket guide presents evidence-based, relevant and up-to-date guidelines that can be used by doctors, midwives, nurses and other workers including traditional birth attendants in their daily work. The book is presented in a format that can be easily carried by professionals during their daily work and can be available at clinics to help guide the management of pregnant women.

2 Nutritional interventions

2.1 Healthy eating and physical activity

WHY?

- **Undernourishment, being overweight and obesity increase the risk of pregnancy complications such as low birth-weight neonates, hypertension, gestational diabetes mellitus and neonatal macrosomia.**

HOW?

- **Provide good advice on balanced energy and protein dietary supplementation.**
- **Encourage daily physical activity.**
- **Measure pregnant women's weight (kilograms with one decimal, e.g. 52.1 kg) and height (meter with two decimals, e.g. 1.62 m) and calculate their Body Mass Index.**
- **Measuring height:**
  - Remove shoes, hair ornaments etc.
  - The back of the head, shoulder blades, buttocks and heels should touch or be in line with the wall.

Figure 1. Measure height without shoes and hair ornaments.

- **Measuring weight:**
  - Remove shoes and heavy over clothes.

Figure 2. Measure weight without shoes and heavy over clothes.

- **Calculating the Body Mass Index:**
  - Weight in kilograms (kg) divided by height in meters squared (kg/m^2)
  - An example: 51.0 kg and 1.62 m --------$BMI=51/1.62^2=19.43$

Normal weight gain during pregnancy		
Weight of woman	**Body Mass Index**	**Aimed weight gain**
Underweight	BMI < 18.5 kg/m^2	12.5–18 kg
Normal weight	BMI 18.5–24.9 kg/m^2	11.5–16 kg
Overweight	BMI 25–29.9 kg/m^2	7–11.5 kg
Obese	BMI > 30 kg/m^2	5–9 kg

2.2 Anaemia, iron and folic acid supplementation

WHY?

- **Maternal anaemia and iron deficiency are associated with increased risks of postpartum haemorrhages, low birth weights, small-for-gestational age babies, puerperal sepsis, preterm births and increased risks of maternal and infant mortality.**

HOW?

- **Take a full blood count test. If full blood count testing is unavailable, test with a haemoglobinometer.**
- **Take a haemoglobin sample from the fingertip. First clean the finger, then prick the fingertip with a lancet. Wipe away the first drop of blood. Collect a blood drop with a capillary tube or pipette. Insert the test strip into the haemoglobin device and read the Hb result.**
- **Screen haemoglobin in pregnancy weeks 12, 26 and 36.**

- **Limits for diagnosing anaemia: week 12: less than 11.0 g/dl, week 26: less than 10.5 g/dl, week 36: less than 11.0 g/dl.**
- **Ask all pregnant women to take 60 mg of iron and 400 mcg (0.4 mg) of folic acid or multiple micronutrient supplements (tablets containing various vitamins including iron and folic acid) daily for the prevention of anaemia.**
- **If diagnosed with anaemia, ask pregnant women to take 120 mg of oral iron and 0.4 mg of folic acid daily.**
- **Give folate (vitamin B9) to decrease the risk of neural tube deficiency.**

How to treat anaemia?

	Symptoms	**Treatment**
Severe anaemia	Haemoglobin < 7.0 g/dl and/or severe palmar and conjunctival pallor or any pallor with breathlessness in rest and/or respiratory rate with more than 30 breaths/minute and/or if the mother tires easily	**Refer urgently to hospital**
Moderate anaemia	Haemoglobin 7.0–11.0 g/dl or palmar or conjunctival pallor	**120 mg of oral iron and 0.4 mg of folic acid daily for three months** (or double the dose of a combination tablet containing 60 mg of iron and 0.4 mg of folic acid from one tablet daily to one tablet twice daily) Check the compliance to treatment Reassess in 4–6 weeks and if the anaemia persists, refer to hospital Consider antimalarial and/or anthelminthic treatment.

Parasitic infections affecting anaemia

WHY?

- **Parasitic infections can cause iron-deficiency related anaemia by feeding on the blood and causing further bleeding by releasing anticoagulant compounds. These may also reduce the absorption of iron and other nutrients by causing anorexia, vomiting and diarrhoea.**
- **Preventive anthelminthic treatment reduces the burden of other infections, e.g. HIV, malaria and TB and treatment reduces infant and maternal mortality.**

HOW?

- **Diagnose with a laboratory test by counting the concentration of eggs in the stools.**
- **Give a single-dose of Albendazole 400 mg or Mebendazole 500 mg after the first trimester if:**
  - living in areas where the baseline prevalence of hookworm and/or T. trichiura infection is 20% or more among pregnant women, and
  - where anaemia is a severe public health problem, with a prevalence of 40% or higher among pregnant women.

- **In areas where hookworm and/or T. trichiura are endemic, treat all pregnant women after the first trimester to reduce the worm burden in those who are moderately to heavily infected.**
- **Provide health promotion about hygiene, such as hand washing, use of footwear and proper disposal of faeces at the same.**

2.3 Calcium supplementation

WHY?

- Calcium is needed for the development of bones and teeth and functioning of muscles and nerves.
- It is also associated with the development of hypertensive disorders in pregnancy.
- Calcium must be obtained from food or supplements.

HOW?

- Provide advice on calcium-rich foods, e.g. camel milk, yoghourt, milk, spinach, okra, dates, oranges, and white beans.
- If the calcium intake is low and there is a risk of pre-eclampsia provide advice on taking calcium supplementation 1.5–2.0 g divided into three doses per day, starting from pregnancy week 20 until the end of pregnancy.
- Iron and calcium supplements should be administered at least two hours apart in order to avoid interactions.

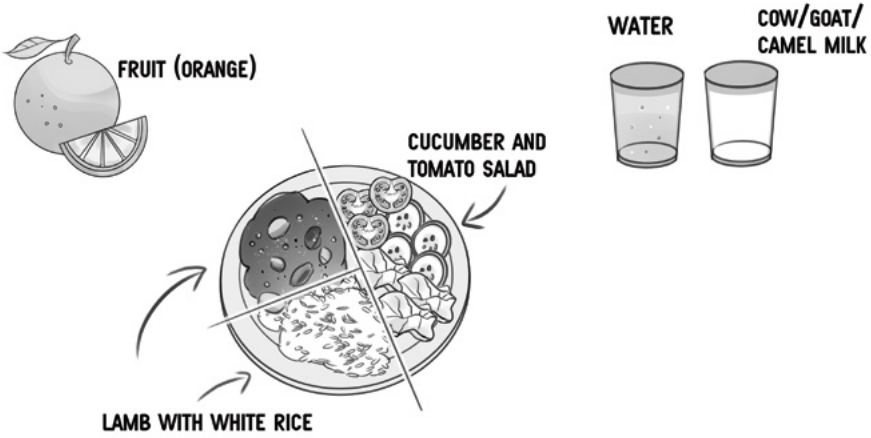


Figure 3. Provide advice on a healthy meal including calcium-rich, iron-rich and rich in vitamin A foods.

2.4 Vitamin A supplementation

WHY?

- Vitamin A deficiency can cause night-time blindness, contribute to the development of anaemia and may be associated with low birth weights.

HOW?

- Recommend a healthy balanced diet and foods rich in vitamin A, e.g. carrots, sweet potatoes, liver, beef and pumpkins.
- If a woman suffers from night blindness in the current pregnancy or if 5% or more of women in a population have a history of night blindness in pregnancy, ask the pregnant woman to take 10,000 IU vitamin A per day, or a weekly dose of 25,000 IU.

3 Maternal and foetal assessment

3.1 Asymptomatic bacteriuria (ASB) and urinary tract infection (UTI)

WHY?

- Treating ASB and UTIs can prevent low birth weights, premature births and pyelonephritis.

HOW?

- Take a midstream urine culture or gram-staining. If not available, use a dipstick test. Ask the pregnant woman to clean herself and then to collect urine "mid-stream" in a clean cup. Dip the test stick into the urine. Wait for 1 minute and read the result according to the colour which you can find on the test package.
- If the protein and/or leucocytes and/or nitrites and/or haemoglobin are positive, it can indicate ASB/UTI in pregnancy. If the leukocytes in the test are positive, ask the pregnant woman to come again to the MHC and take another sample within one week.
- If the second test is still positive, refer to the doctor for a midstream urine culture for diagnosing asymptomatic bacteriuria (ASB) or urinary tract infections (UTI).
- Antibiotic treatment is recommended only after diagnosing ASB/UTI.
- Use a five- to seven-day course of pivmecillinam, nitrofurantoin or beta-lactam for treatment. Nitrofurantoin can be used only until end of pregnancy week 37.
- Take a control urine sample after one week from the end of the antibiotic treatment.

- **With the presence of fever (over 37,9°C), suspect pyelonephritis and refer to the hospital. In case of pyelonephritis use cefuroxime 0.75–1.5 g x 3 i.v.**
- **Group B streptococcus (GBS) bacteriuria indicate heavy colonisation and may not be eradicated with antibiotics. Intrapartum antibiotic treatment is recommended with GBS colonisation to prevent early neonatal infections.**

Figure 4. Test urine sample with a dipstick test, wait for 1 minute and read the result.

3.2 Domestic violence

WHY?

- Domestic violence affects women's physical and mental health through direct pathways, such as injury, and indirect pathways, such as chronic health problems that arise from prolonged stress.

HOW?

- Conditions that can be caused or complicated by DV include traumatic injuries, repeated STIs, an intrusive partner or husband present during consultations, unexplained or repeated genitourinary symptoms, adverse reproductive outcomes including multiple unintended pregnancies and/or terminations, symptoms of depression and anxiety, delay in seeking MCH, alcohol and other substance use, adverse birth outcomes and self-harm, suicidality, symptoms of depression and anxiety.
- Use the midwife-led continuity of care (MLCC) model to offer a way of achieving a positive, trusting and empathetic relationship with pregnant women and also to identify and prevent DV.
- When safe to do so (i.e. the partner is not present) and when identification of DV is followed by an appropriate response, ask the women about violence face-to-face or with a written or computer-based questionnaire.
- Hargeisa Group Hospital has a unit for victims of violence. ANC professionals can refer women who have been exposed to DV to the unit or consult the unit about available services.

Figure 5. Ask the women about domestic violence when safe to do so.

3.3 Hyperglycaemia and gestational diabetes mellitus (GDM)

WHY?

- **Elevated levels of blood sugar increase the risk of pre-eclampsia and macrosomia for the baby.**
- **Diabetes mellitus in pregnancy means that the diabetes has pre-existed before pregnancy. Gestational diabetes mellitus (GDM) means a glucose intolerance of a variable degree with onset or first recognition during pregnancy. Diabetes mellitus in pregnancy differs from GDM in that hyperglycaemia is more severe and does not resolve after pregnancy as it does with GDM.**

HOW?

- **Screen for risk factors for diabetes and test for hyperglycaemia.**
- **The usual window for diagnosing GDM is between 24 and 28 weeks of gestation.**
- **If glucose is high in the test (hyperglycaemia), ≥5.1 mmol/l refer to the hospital (or a well-equipped MCH, maternal and child health clinic) for conducting an oral glucose tolerance test (OGTT) and treatment.**
- **If an oral glucose tolerance test, OGTT is possible, use that instead of a quick test. If not, the fasting blood glucose with a quick test should be tested before pregnancy week 28.**
- **Provide advice on healthy eating and physical activity.**

Risk factors:	
BMI >30kg/m^2	Age >35 years
Previous GDM	Polycystic ovary syndrome, PCOS
Previous macrosomia	Previous spontaneous abortion
Family history of DM	Previous foetal death
Glucose ++ or above on one occasion or + on two or more occasions while utilising a Urine dipstick test	Multiparity, more than three children

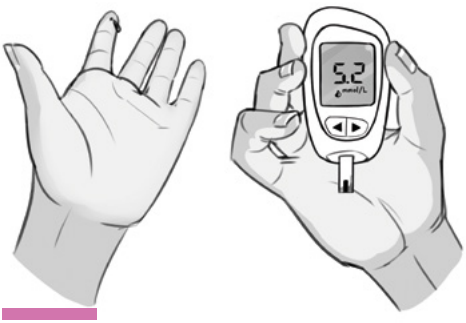


Figure 6. Take a blood glucose test from fingertip and read the result.

The diagnosis of **gestational diabetes mellitus (GDM)** and **diabetes mellitus in pregnancy** at any time during pregnancy should be based on any one of the following values:

	Gestational diabetes mellitus (GDM)	**Diabetes mellitus in pregnancy**
Fasting plasma glucose	= 5.1–6.9 mmol/l (92–125 mg/dl)	≥ 7.0 mmol/l (126 mg/dl)
1-h post 75g oral glucose load	>=10.0 mmol/l (180 mg/dl)	
2-h post 75g oral glucose load	= 8.5–11.0 mmol/l (153–199 mg/dl)	≥ 11.1 mmol/l (200 mg/dl)
Random plasma glucose		≥ 11.1 mmol/l (200 mg/dl) in the presence of diabetes symptoms

3.4 Hypertension, proteinuria and pre-eclampsia

WHY?

- **Approximately one quarter of maternal deaths and near misses are caused by pre-eclampsia and eclampsia, thus blood pressure and proteinuria must be checked at every routine ANC contact.**

HOW?

- **Educate the mother and her family to recognise the critical signs of pre-eclampsia: headache, blurred vision, convulsions, loss of consciousness, epigastric pain and breathing difficulties.**

- **Blood pressure is considered elevated if the systolic blood pressure is equal or higher than 140 mmHg OR the diastolic blood pressure equal to or higher than 90 mmHg.**
- **Elevated blood pressure needs to be monitored more intensively or immediately lowered depending on the severity of the findings.**
- **Recognising the type of hypertensive disorder is important, because they are often managed differently.**
- **Hypertension in pregnancy can be diagnosed if the systolic pressure (SBP) is 140–159 mmHg and/or diastolic blood pressure (DBP) is 90–109 mmHg.**
- **The blood pressure is in a severe range if the systolic blood pressure (SBP) is 160 mmHg or higher and/or the diastolic blood pressure (DBP) is 110 mmHg or higher.**

Figure 7. Measure blood pressure after sitting for a while and on left arm.

Elevated blood pressure without accompanying findings is likely to be either:

1) **chronic hypertension,** which occurs before 20 weeks of gestation or
2) **gestational hypertension,** which occurs for the first time after 20 weeks of gestation, during labour and/or within 48 hours of giving birth.

Management depends on the severity of the hypertension

Blood pressure	Blood pressure, mmHg	Treatment
Normal	SBP 90–139 mmHg and DBP 60–89 mmHg	Normal follow up, ask the mother to come to the MCH as usual.
Elevated	SBP 140–159 mmHg and/or DBP 90–109 mmHg	No need to refer to hospital. Ask the mother to come to the MCH after three days and take her blood pressure and test the urine using the dipstick method even though she may have no symptoms. Educate the mother to recognise the critical signs of pre-eclampsia and advise her to go to the MCH or hospital if she has the signs.
High	SBP 160 mmHg or higher and/or DBP 110 mmHg or higher.	Refer the mother right away to a hospital. Consult physician or hospital about antihypertensive medication.

If hypertension is associated with symptoms such as headaches, blurred vision, convulsions, loss of consciousness, epigastric pain, breathing difficulties or any laboratory findings such as proteinuria, elevated liver enzymes, elevated creatinine or thrombocytopenia, the possibility for

3) **chronic hypertension** with superimposed pre-eclampsia or
4) **pre-eclampsia-eclampsia** must be taken into consideration.

Mild pre-eclampsia	Treatment
SBP 140–159 mmHg and/or DBP 90–109 mmHg AND proteinuria 2+ on dipstick	Monitor blood pressure, symptoms, proteinuria, and foetal condition twice a week. Provide advice concerning the danger signs.

Severe pre-eclampsia	Treatment
SBP 160 mmHg or higher and/or DBP 110 mmHg or higher (after 20 weeks of pregnancy) and/or proteinuria 2+ on dipstick and/or any of the symptoms: • Headaches (increasing frequency, unrelieved by regular analgesics) • Vision changes (e.g. blurred vision) • Oliguria (passing less than 400 mL of urine in 24 hours) • Upper abdominal pain (epigastric pain or pain in right upper quadrant) • Difficulty breathing (rales may be observed during auscultation of lungs due to fluid in the lungs) • Nausea and vomiting • Hyperreflexia or clonus	Refer to hospital. Consult physician or hospital about antihypertensive medication.

If further laboratory analyses are available, severe findings can include:	
Proteinuria	≥ 300 mg in a 24-hour urine sample protein/creatinine ratio ≥ 0.3
Liver enzymes (transaminases)	more than twice the normal range
Serum creatinine	≥ 1.1 mg/dL or a doubling of serum creatinine in the absence of other renal disease
Platelets	< 100 000 cells/mcL (100 x 10^9/L)

- Convulsions with signs of pre-eclampsia indicate eclampsia.
- Convulsions can occur regardless of the severity of hypertension.
- Treat all pregnant women with convulsions as if they have eclampsia until another diagnosis is confirmed.
- Convulsions represent a medical emergency which need to be treated immediately on-site.

3.5 Preterm birth

WHY?

- **Identification and prevention of imminent pre-term births reduce long-term health effects and perinatal deaths related to pre-term birth.**

HOW?

- **Risk factors for preterm births are multiple pregnancy, infections and chronic conditions such as diabetes and high blood pressure.**
- **Women with suspected or detected imminent preterm birth should be referred to hospital for further examination and treatment. Examinations include a cervical examination to detect cervical dilatation. Tocolytic medication and corticosteroid therapy can be used in the hospital.**
- **Women with imminent preterm birth should be referred to hospital also for adequate childbirth care and preterm new-born care.**

3.6 Malpositions and malpresentations

WHY?

- If the foetus is in an abnormal position or presentation, pregnancy may result in prolonged or obstructed labour, maternal mortality and perinatal mortality.

HOW?

- Carry out a careful vaginal and/or abdominal palpation and ultrasound if available, to identify malpositions and malpresentations.
- Refer to hospital. Delivery with a foetus in a malposition or malpresentation should take place in a hospital with the ability to perform an emergency caesarean section.
- The presence of a skilled birth attendant is essential for a safe vaginal breech birth.
- Attempt an external cephalic version if a breech presentation is present at or after 37 weeks, and vaginal birth is possible, facilities for emergency caesarean section are available, membranes are intact and amniotic fluid is adequate and there are no complications.

Figure 8. Carry out abdominal palpation. The mother should lay down in a semi-recumbent/ dorsal position (at a 45-degree angle), with her knees slightly bent and arms by her side.

3.7 Multiple pregnancy

WHY?

- Multiple pregnancies are associated with greater severe maternal morbidity and maternal/perinatal mortality due to obstetric complications such as pre-eclampsia, post-partum haemorrhage, and preterm birth.

HOW?

- Carry out a careful vaginal and/or abdominal palpation and ultrasound if available, to identify multiple pregnancies.
- Handle antenatal care in the hospital. Timely access to a safe caesarean section is required.

3.8 HIV and syphilis

WHY?

- Testing and counselling reduces maternal morbidity, foetal loss, and neonatal mortality/morbidity due to HIV and syphilis.

HOW?

- Use a screening test including both HIV and syphilis at the first trimester and counsel for HIV.
- Offer oral pre-exposure prophylaxis (PrEP) containing tenofovir disoproxil fumarate (TDF) as an additional HIV prevention.
- Use ART (antiretroviral therapy) in all pregnant women diagnosed with HIV, because it improves individual health outcomes, prevents mother-to-child transmissions of HIV, and prevents the horizontal transmission of HIV from the mother to an uninfected sexual partner.

- Screen all pregnant women for syphilis again in late pregnancy. Women who do not have test results at delivery should be tested or retested at the MCH or hospital just before the delivery.
- Treat syphilis with penicillin. The women's partners should also be tested and treated with penicillin if needed. Provide education on how to prevent re-infection.

3.9 Tuberculosis (TB)

WHY?

- Respiratory diseases such as tuberculosis, are an important cause of morbidity and mortality in pregnant women in Somaliland.
- TB increases the risk of preterm birth, perinatal death and other pregnancy complications.

HOW?

- Screen using chest radiography because there is no significant risk. Notice: national guidelines for the use of radiography should still be followed.
- If TB is diagnosed, all household contacts and other close contacts should also be systematically screened for TB.
- People living with HIV should also be systematically screened for active TB at each contact at the health-care facility.
- Treat pregnant women with TB with antibiotics. With the exception of streptomycin, first line anti-TB drugs are safe for use in pregnancy: streptomycin is ototoxic to the foetus and should not be used during pregnancy.
- Pyridoxine supplementation is recommended for all pregnant or breastfeeding women taking isoniazid for TB.

3.10 Symphysis-fundal height (SFH) measurement and abdominal palpation

WHY?

- Use SFH to access foetal growth. At the same time check the position of the foetus. If the SFH results differ from the average level, this may indicate a growth abnormality of the foetus.

HOW?

- The mother should be in a semi-recumbent position (at a 45-degree angle) on a firm surface, with an empty bladder, and expose enough of the abdomen to allow a thorough two-handed palpation.
- Run a non-elastic tape measure along the longitudinal axis of the uterus (not correcting to the midline) to the highest point of the uterus.
- When using customised growth charts, the curves should not flatten towards end of pregnancy; uncompromised babies should continue growing until delivery. Measure in the same way, and if there is static/slow growth, refer to hospital to obtain an ultrasound scan.

Figure 9. Measure symphysis-fundal height with tape measure along the longitudinal axis of the uterus in the same way every time.

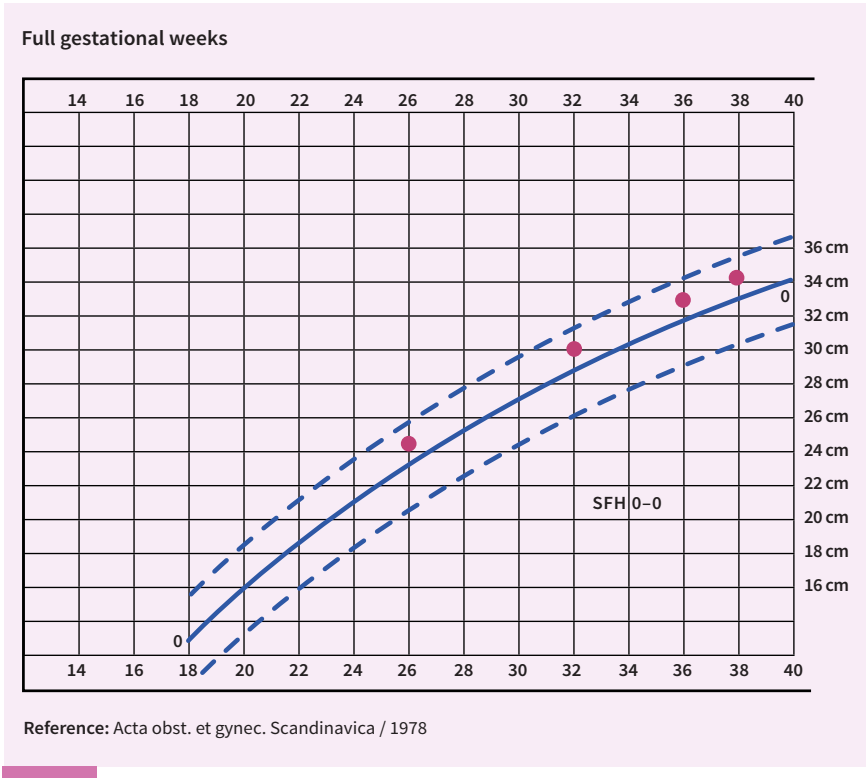


Figure 10. Check growth of the baby using the result of the SFH-measurement and comparing it with the customised growth chart. The curves of the measurement results should not flatten towards end of pregnancy.

3.11 Ultrasound scan

WHY?

- **One ultrasound scan should be done before 24 weeks of gestation (early ultrasound) to estimate the gestational age, improve the detection of foetal anomalies and multiple pregnancies, reduce the induction of labour for post-term pregnancy, and improve a woman's pregnancy experience overall.**

4 Preventive measures

4.1 Tetanus toxoid immunization status and vaccine

WHY?

- **The vaccination of a mother with tetanus toxoid (TT) protects the child from infection for the first weeks as well.**

HOW?

- **The immunisation status should be checked during the first antenatal contact. If the mother has not been vaccinated or her vaccination status is unknown, the mother should be vaccinated accordingly:**

1st vaccination, TT1	2nd vaccination, TT2	3rd vaccination, TT3	4th vaccination, TT4	5th vaccination, TT5
at the first ANC contact (or anywhere, 1 dose immediately)	at the second contact (4 weeks after the TT1)	6 months after the TT2	1 year after TT3 or during a subsequent pregnancy	1 year after TT4 or during a subsequent pregnancy

4.2 Prevention of malaria

WHY?

- Malaria infection during pregnancy is a major public health problem with substantial risks for the mother, her foetus, and the new-born.

HOW?

- Promote the use of insecticide-treated nets, treat cases effectively, and in areas with moderate to high transmission of Plasmodium falciparum administer IPTp-SP.
- Start dosing in the second trimester, and give doses at least one month apart, with the objective of ensuring that at least three doses are received.

5 Common physiological symptoms

5.1 Nausea and vomiting

– Recommend ginger, chamomile, mint oil, lemon oil, vitamin B6 and/or acupuncture to relief nausea and vomiting.

5.2 Heartburn

– Provide advice on diet and lifestyle to prevent and relieve heartburn. Antacids (e.g. magnesium carbonate and aluminium hydroxide preparations) can be offered to women with troublesome symptoms that are not relieved by lifestyle modification.

5.3 Leg cramps

– Provide advice on the use of magnesium, calcium or non-pharmacological treatment options for the relief of leg cramps.

5.4 Back and pelvic pain

– Recommend regular exercise throughout pregnancy to prevent low back and pelvic pain and if available, also recommend physiotherapy, support belts and acupuncture.

5.5 Constipation

– Provide advice on dietary modifications, wheat bran or other fibre supplements to relieve constipation.

5.6 Varicose veins and oedema

– Provide advice on compression stockings, leg elevation, rest and water immersion to manage varicose veins and oedema.

6 Health systems

Different kinds of interventions can be employed to improve the utilisation and quality of ANC. Eight ANC contacts is a long-term target, and at least four contacts as the short-term target.

6.1 Woman-held case notes

Give each pregnant woman her own case notes during pregnancy to improve continuity, quality of care and a positive pregnancy experience.

6.2 Group antenatal care

Organize group care as an alternative to individual antenatal care for pregnant women. It is good to use an appropriate room to deal with group sessions, for example the rooms should be large enough, well-ventilated or sheltered spaces with adequate seating. A private area should be available for examinations, and opportunities should be given for private conversations.

Figure 11. Organize group care meetings in a room large enough or outdoors.

6.3 Women's groups

Organize women's groups in your MCH or together with other MCHs nearby and provide opportunities for women to discuss their needs during pregnancy, including barriers to accessing care, and to increase support among pregnant women.

6.4 Home visits

Organize antenatal home visits and mobilise community workers who are working together with you to improve antenatal care utilisation and perinatal health outcomes, particularly in rural settings with minimal access to health services.

6.5 Task-shifting

Share your tasks in antenatal care between various health-care providers and lay people. For example the distribution of recommended nutritional supplements can be shifted from midwives to lay health workers.

6.6 Staff in rural and remote areas

Take care that MoHD organizes and employs qualified health workers also in rural and remote areas.

6.7 Fathers or partners in maternity care

Invite fathers/partners and encourage mothers to ask their partners to participate during antenatal contacts, delivery and postnatal contacts. Promotion of the role of men as partners and fathers is essential for their involvement and support.

7 Antenatal care contact schedules

The short-term target for Somaliland is to achieve at least four ANC contacts to improve maternal and child health and to avoid maternal, perinatal and infant deaths.

Scheduled contacts:

1. 12 weeks
2. 26 weeks
3. 32 weeks
4. 36–38 weeks

7.1 Short-term target with four ANC contacts

Checklist of the four contacts ►►►

1st Contact at 12 weeks

Basic information and counselling

- Mother: name, age, phone number, town/village
- Medical history of the mother: existing medical conditions, medications, number of pregnancies and births, problems with previous pregnancies, FGM/C
- Current pregnancy: last periods, trimester of first contact, EDD (estimated date of delivery), planned place for delivery, place for emergency delivery
- Nutritional counselling
- Iron and folic acid supplementation
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, mental well-being
- Information about DV (domestic violence)
- Psychosocial support

Clinical examinations

- Height
- Weight
- Calculate BMI (kg/m^2)
- Blood pressure mmHg
- Fasting blood glucose test or OGTT (contact 1 or 2 according to findings)
- Urine dipstick test
- Haemoglobin (g/dl)
- HIV-ART, syphilis, tetanus vaccination
- Ultrasound
- Abdominal palpation: size of uterus, scars on abdomen, pains during palpation
- If there is a proper Doppler foetal monitor available, the foetal heart rate can be checked. Otherwise this can be checked on the 2nd visit.

2nd Contact at 26 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Anthelminthic treatment
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Breastfeeding counselling
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Fasting blood glucose test or OGTT (If not done during the 1st contact or hyperglycaemia has been detected during the first contact)
- Urine dipstick test
- Haemoglobin (g/dl)
- SFH measurement: size of uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: size of uterus, scars on abdomen, pains with palpation

3rd Contact at 32 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Intent to breastfeed (and counselling on this issue)
- Anthelminthic treatment
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Urine dipstick test
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: growth of the baby, position of the baby: cephalic/breach/unknown, scars on abdomen, pains during palpation

4th contact at 36 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, maternal well-being
- Information about DV (domestic violence)
- Breastfeeding counselling
- Counselling for birth preparedness
- Counselling on the importance of postpartum contacts
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Urine dipstick test
- Haemoglobin (g/dl)
- SFH measurement: size of uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: growth and position of the baby: cephalic/breach/unknown, scars on abdomen, pains with palpation

If the first ANC contact is later than 12 weeks, the collection of basic information and the performance of clinical examinations generally planned for the first contact should be done then in addition to what is planned for the week the contact occurs in. Counselling should also cover all aspects that would have been dealt with starting from 12 weeks.

7.2 Long-term target with eight ANC contacts

The long-term target for Somaliland is to achieve eight ANC contacts to improve maternal and child health, to avoid maternal, perinatal and infant deaths, and for pregnant women in Somaliland to have a positive pregnancy experience.

Scheduled contacts:

1. 12 weeks
2. 20 weeks
3. 26 weeks
4. 30 weeks
5. 34 weeks
6. 36 weeks
7. 38 weeks
8. 40 weeks

Checklist of the eight contacts ►►►

1st Contact at 12 weeks

Basic information and counselling

- Mother: name, age, phone number, town/village
- Medical history of the mother: existing medical conditions, medications, number of pregnancies and births, problems with previous pregnancies, FGM/C
- Current pregnancy: last periods, trimester of first contact, EDD, planned place of birth, place for emergency childbirth
- Nutritional counselling
- Iron and folic acid supplementation
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, mental well-being
- Information about DV (domestic violence)
- Psychosocial support

Clinical examinations

- Height
- Weight
- Calculate BMI (kg/m^2)
- Blood pressure mmHg
- Fasting blood glucose test or OGTT (contact 1, 2 or 3 according to findings)
- Urine dipstick test
- Haemoglobin (g/dl)
- HIV-ART, syphilis, tetanus vaccination
- Ultrasound
- Abdominal palpation (size of uterus, scars on abdomen, pains with palpation)
- If there is a proper Doppler foetal monitor available, the foetal heart rate can be checked. Otherwise this can be checked on the 2nd visit.

2nd Contact at 20 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Anthelminthic treatment
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Fasting blood glucose test or OGTT (if not done during the 1st contact or hyperglycaemia has been detected during the first contact)
- Urine dipstick test
- Ultrasound if not done during the first contact
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: size of the uterus and growth of the baby, scars on abdomen, pains with palpation

3rd Contact at 26 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Anthelminthic treatment
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (Domestic violence)
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Fasting blood glucose test or OGTT (if not done during 1st or 2nd contact or hyperglycaemia has been detected at these contacts)
- Urine dipstick test
- Haemoglobin (g/dl)
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: size of the uterus and growth of the baby, scars on abdomen, pains with palpation

4th Contact at 30 weeks

Counselling

- Nutritional counselling
- Iron, Folic acid, calcium supplementation
- HIV-ART
- Intent to breastfeed and counselling
- Assessment of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Psychosocial support

Clinical examination

- Weight
- Blood pressure mmHg
- Urine dipstick test
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: growth and position of the baby: cephalic/breach/unknown, scars on abdomen, pains with palpation

5th Contact at 34 weeks

Counselling

- Nutritional counselling
- Iron, Folic acid, calcium supplementation
- HIV-ART
- Assessment and counselling of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Counselling for breastfeeding
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Urine dipstick test
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: position of the baby: cephalic/breach/unknown, scars on abdomen, pains with palpation

6th Contact at 36 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Assessment and counselling of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Counselling for breastfeeding
- Counselling for birth preparedness
- Counselling on the importance of post-natal contacts
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Urine dipstick test
- Haemoglobin (g/dl)
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: growth and position of the baby: cephalic/breach/unknown, scars on abdomen, pains with palpation

7th Contact at 38 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Assessment and counselling of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt
- Information about DV (Domestic violence)
- Counselling for breastfeeding
- Counselling for birth preparedness
- Counselling on the importance of post-natal contacts
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Urine dipstick test
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: growth and position of the baby: cephalic/breach/unknown, scars on abdomen, pains with palpation

8th Contact at 40 weeks

Counselling

- Nutritional counselling
- Iron, folic acid, calcium supplementation
- HIV-ART
- Assessment and counselling of significant symptoms: overall impression, pains, changes to vision, urinary problems, breathing difficulties, nausea and vomiting, heartburn, vaginal bleeding, vaginal discharge, leg cramps, oedema, severe itching, foetal movements felt, mental well-being
- Information about DV (domestic violence)
- Counselling for breastfeeding
- Counselling for birth preparedness
- Counselling on the importance of post-natal contacts
- Psychosocial support

Clinical examinations

- Weight
- Blood pressure mmHg
- Urine dipstick test
- SFH measurement: size of the uterus, growth of the baby
- Foetal heart rate
- Abdominal palpation: growth and position of the baby: cephalic/breach/unknown, scars on abdomen, pains with palpation

ANC Contact Schedules

ANC contact schedules	Short-term target: 4 contacts			
	1st	2nd	3rd	4th
Basic information and counselling	**12 weeks**	**26 weeks**	**32 weeks**	**36 weeks**
Mothers' information	X			
Medical history	X			
Current pregnancy	X			
Nutritional counselling	X	X	X	X
Iron and folic acid supplementation	X	X	X	X
Calcium supplementation		X	X	X
HIV–ART		X	X	X
Anthelminthic treatment		X	X	
Assessment of significant symptoms	X	X	X	X
Information about domestic violence	X	X	X	X
Counselling for breastfeeding		X	X	X
Counselling for birth preparedness				X
Counselling on the importance of postpartum contacts				X
Psychosocial support	X	X	X	X

ANC contact schedules	Long-term target: 8 contacts							
	1st	2nd	3rd	4th	5th	6th	7th	8th
Basic information and counselling	**12 weeks**	**20 weeks**	**26 weeks**	**30 weeks**	**34 weeks**	**36 weeks**	**38 weeks**	**40 weeks**
Mothers' information	X							
Medical history	X							
Current pregnancy	X							
Nutritional counselling	X	X	X	X	X	X	X	X
Iron and folic acid supplementation	X	X	X	X	X	X	X	X
Calcium supplementation		X	X	X	X	X	X	X
HIV-ART		X	X	X	X	X	X	X
Anthelminthic treatment		X	X					
Assessment of significant symptoms	X	X	X	X	X	X	X	X
Information about domestic violence	X	X	X	X	X	X	X	X
Counselling for breastfeeding					X	X	X	X
Counselling for birth preparedness						X	X	X
Counselling on the importance of postpartum contacts						X	X	X
Psychosocial support	X	X	X	X	X	X	X	X

Clinical examinations	1st	2nd	3rd	4th	1st	2nd	3rd	4th	5th	6th	7th	8th
	12 weeks	26 weeks	32 weeks	36 weeks	12 weeks	20 weeks	26 weeks	30 weeks	34 weeks	36 weeks	38 weeks	40 weeks
Height	x				x							
Weight	x	x	x	x	x	x	x	x	x	x	x	x
Calculate the BMI (kg/m^2)	x				x							
Blood pressure mmHg	x	x	x	x	x	x	x	x	x	x	x	x
Fasting blood glucose test or OGTT	x	(x)			x	(x)	(x)					
Urine dipstick test	x	x	x	x	x	x	x	x	x	x	x	x
Haemoglobin (g/dl)	x	x		x	x		x			x		
HIV-ART and syphilis test	x				x							
Check status of tetanus vaccination	x				x							
Ultrasound	x				x	(x)						
SFH measurement		x	x	x		x	x	x	x	x	x	x
Foetal heart rate		x	x	x		x	x	x	x	x	x	x
Abdominal palpation	x	x	x	x	x	x	x	x	x	x	x	x

(x) if needed or not done during the previous contact

8 Breastfeeding

WHY?

- **Exclusive breastfeeding for the first six months and breastfeeding until the baby reaches two years are recommended to improve the health of the baby. Exclusive breastfeeding means that the baby is fed only with breast milk without any additional food or drink, not even water and it is recommended until the baby is six months old.**
- **Breastfeeding**
  - provides all the energy and nutrients that the baby needs for the first months of life
  - promotes sensory and cognitive development
  - reduces child mortality, because it protects the infant against infectious diseases such as diarrhoea or pneumonia and has health benefits that extend into adulthood
  - helps a quicker recovery during illness
  - has health benefits that extend into adulthood, for example it reduces the risk of heart disease and type 2 diabetes
  - also improves maternal health and well-being. It helps protect against post-partum haemorrhage, postpartum depression and it reduces the risk of ovarian cancer and breast cancer.
  - is a safe way of feeding, adds family and national resources, and is safe for the environment.

HOW?

- **Give active support and information and empower mothers to establish and sustain appropriate breastfeeding practices, already during pregnancy.**
- **Initiation of breastfeeding within the first hour of life**
- **Breastfeeding on demand–that is, as often as the child wants, day and night**
- **No use of bottles, teats or pacifiers**

Figure 12. Recommend exclusive breastfeeding for the first six months and breastfeeding until the baby reaches two years.

9 Birth spacing

WHY?

- **Birth spacing and ensuring access to preferred contraceptive methods for women and couples reduces maternal and infant morbidity and mortality.**
- **Birth spacing**
  - allows the spacing of pregnancies and limits the size of families when needed or wished
  - prevents unintended pregnancies, including those of young and older women who face increased risks related to pregnancy
  - allows people to make informed choices about their sexual and reproductive health. It represents an opportunity for girls and women to participate in education and in public life, including paid employment in non-family organisations.
  - enables parents to invest more in each child
  - has an effect on infant mortality rates, because it can prevent closely-spaced and ill-timed pregnancies and births. Pregnant adolescents are more likely to have preterm or low birth-weight babies, which leads to higher rates of neonatal mortality among them.
  - reduces the risk of unintended pregnancies among women living with HIV. This has an impact on the number of infected babies and orphans.

HOW?

- Discuss birth spacing with the family already during the antenatal period.
- Choosing the right method for a woman depends on her health situation and smoking habits.
- Choose from the various birth-spacing methods: pills, implants, injections, patches and intrauterine devices. Also the traditional methods, such as the calendar method are available.

10 Female genital mutilation or cutting (FGM/C)

WHY?

- There are several health risks of FGM/C, e.g. haemorrhage, pain, urine retention, genital tissue swelling, infections and problems with wound healing. Long-term complications include increased risk of urinary tract infections, bacterial vaginosis, dyspareunia and obstetric complications.
- Women with FGM/C may have various emotional and psychosocial difficulties, e.g. post-traumatic stress disorder, anxiety, somatisation, phobia, and low self-esteem. Childbirth can activate the negative feelings that FGM/C has caused.
- FGM/C violates girls' and women's rights to life, physical integrity and health.

HOW?

- Awareness raising of FGM/C: Community participatory learning, multifaceted discussion groups, and action cycles with women's groups should be provided as part of education and communication interventions with regard to the health risks and violation of human rights related to FGM/C.
- Psychological support for survivors of FGM/C: All girls and women who have undergone FGM/C should be offered psychological support and sexual counselling for preventing and treating emotional and psychosocial difficulties and sexual dysfunction.
- Ending FGM/C in the health sector: FGM/C by health-care providers or reinfibulation should not be performed in any case.

- **High quality care and defibulation for survivors of FGM/C: Women with FGM/C should be offered quality health care and the opportunity for defibulation with local anaesthesia, to enable the prevention and treatment of urologic and obstetric complications, either antepartum or intrapartum.**

Figure 13. Talk about FGM/C with a woman and her husband. Women with FGM/C should be offered the opportunity for defibulation.

Healthy mothers and babies are the foundation of a society. The best way to ensure the health of mothers and babies is to develop universal, well-functioning and high quality antenatal care (ANC). This pocket guide is for all ANC professionals, traditional birth attendants and family workers, training institutions, students, INGOs, and NGOs. With this new pocket guide, all professionals working in ANC will have the best evidence on how to screen, treat and guide pregnant women in Somaliland to ensure a safe pregnancy and childbirth for every woman in Somaliland.

Finnish institute for health and welfare

NUOVO NORDIC HEALTHCARE SERVICES